

dy # 4

Lockheed Aircraft Corp. P.O. Box 105 San Valley, California		Engineering Study <input checked="" type="checkbox"/> Change Proposal <input type="checkbox"/>	
No. LAC - 1 Rev. #1	Date 3-5-59	Affected Activities: <input checked="" type="checkbox"/> WSPO <input checked="" type="checkbox"/> Project	
Name of Major Component Airplane	Part or Lowest Subassembly Autopilot	Part No. & Model or Type LEAR	
Title of Proposal: AUTOPILOT CONTROL & RELIABILITY			
Nature of Proposal: LAC & LEAR are to instrument an airplane at EAFB for the purpose of determining autopilot malfunctions and fixes for same. This program will involve approximately 10 flights spread over 4 - 6 weeks. Included in the 4 - 6 weeks is one week required by LEAR to calibrate and check their system previous to start of flights. <div style="text-align: right;">(cont. attached page)</div>			
Reason for Proposal: In the past four years of flight operation the Lear Autopilot has had inconsistent operating characteristics. The purpose of this study is to find ways and means of improving the autopilot stability and reliability. We recommended that the following be jointly investigated by LAC and Lear. <div style="text-align: right;">STATINTL (cont. on attached pages)</div>			
Estimated Cost and Time Involved		<div style="border: 1px solid black; width: 100px; height: 20px; display: inline-block;"></div> See Cost Recap on Page 2	
Additional Funding Required None			
Estimated Cost for Kits or Parts			
Additional Funding Required None			
Items Affected by Proposal: <div style="display: flex; flex-wrap: wrap; justify-content: space-between;"> <div><input checked="" type="checkbox"/> Safety</div> <div><input checked="" type="checkbox"/> Mission Effectiveness</div> <div><input checked="" type="checkbox"/> Performance</div> <div><input checked="" type="checkbox"/> Operating Procedure</div> <div><input type="checkbox"/> Inter-changeability</div> <div><input type="checkbox"/> Weight or Weight & Bal.</div> <div><input type="checkbox"/> Tools & Support Equipment</div> <div><input checked="" type="checkbox"/> Maintenance Procedure</div> <div><input checked="" type="checkbox"/> Service Life</div> <div><input checked="" type="checkbox"/> Pilots Handbook</div> <div><input checked="" type="checkbox"/> E & M Manual</div> <div><input type="checkbox"/> O'Haul Manual</div> <div><input type="checkbox"/> Parts Catalog</div> </div>			
Est. Man/Hrs. Req'd. to Accomplish Change in Field			
Source Of Parts For Kit		Availability	
Spares Affected		Disposition	
Initiated By: LAC		Approved WSPO Project	

Nature of Proposal (cont.)

Lear & LAC will have special Trim Servo control, mach amplifier, reworked roll trim servo and engineer ready to start this test on about March 23. Costs of in-plant engineering reworking above units are absorbed by Lear as product improvement. Only cost additional to flight test is Lear field engineer services for test.

~~Current overall flight test man hours and costs will not increase as a result of running these tests.~~

Cost Estimate

STATINTL

Lear Cost
Design Coverage
Flight Test

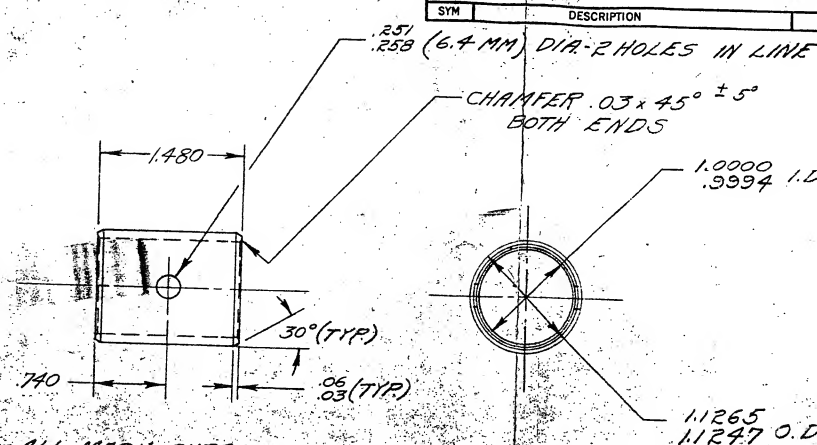
Total

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Authorization required but no additional funding. Present SP-1918 funding seems sufficient to cover these costs. Propose that cost be divided between Customers 1 and 2.

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SYMBOL		DESCRIPTION		REVISIONS		SERIAL NO.		DFTMN		CHK		DATE		APPD	



NOTE

1. TEST ROUGHNESS - ALL MAGH SURFACES
2. MAKE FROM 1 1/2 DIA. x 2.8630 STA. ROD MIL-S-6050 COND. F-4
3. NO IMPRESSION STAMPING
4. MAGNETICALLY INSPECT
5. CONCENTRICITY TO BE .003 T.I.R. PER INCH OF LARGEST DIA. .0003 T.I.R.
6. H.T. 125,000. VLT. 75 PSI

REQD		PART NO.		DESCRIPTION		MATERIAL		SIZE		MATL SPEC		HEAT TREAT													
LIST OF MATERIAL																									
ODD DASH NUMBER - SHOWN, NEXT HIGHER CONSECUTIVE EVEN DASH NUMBER - OPPOSITE																									
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.																									
FRACTION		TOLERANCES ON		DECIMAL		ANGLE		DATE		DFTMN		CHK													
±		.X .XX .XXX		±		±																			
		.03 ± .010																							
LAYOUT																									
MFR AND FINISH PER LOCKHEED PROCESS SPEC 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000																									

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